

ABSTRACT OF THE DISCLOSURE

RADIOFREQUENCY TRANSMITTER WITH A HIGH DEGREE OF  
INTEGRATION AND POSSIBLY WITH SELF-CALIBRATING IMAGE

DELETION

5 The invention relates to a radiofrequency transmitter, of the type supplied with two signals in baseband and in quadrature,  $i(nT)$  and  $q(nT)$ , which are images from two binary streams representing information to be transmitted.

10 According to the invention, the radiofrequency transmitter comprises : means (1) of transposition into an intermediate frequency and digital processing, providing a first transposition into the digital domain, at an intermediate frequency  $\omega_0$ , for said baseband signals, and generating, by combination, two signals of intermediate frequency in quadrature; means (2) of direct conversion, providing a second transposition into the analog domain, after multiplication by a frequency  $\omega_1$ , followed by a summation of said two signals at intermediate frequency and in quadrature, in such a way that a resultant signal is generated which is found finally around a frequency  $\omega_2$ , where  $\omega_2 = \omega_0 + \omega_1$ .

20 In an advantageous variant, the radiofrequency transmitter additionally comprises means of digitally compensating gain and phase imperfections in said means of direct conversion.